

	A	B	C	D	E	F	G	H	I	J	K	L
74					Theta Star	32.83						
75					nu star	179.4						
76												
77				A-D Test Statistic	0.401		Nonparametric Statistics					
78				5% A-D Critical Value	0.697		Kaplan-Meier (KM) Method					
79				K-S Test Statistic	0.697		Mean					
80				5% K-S Critical Value	0.332		SD					
81	Data appear Gamma Distributed at 5% Significance Level						SE of Mean					
82							95% KM (t) UCL					
83	Assuming Gamma Distribution						95% KM (z) UCL					
84	Gamma ROS Statistics using Extrapolated Data						95% KM (jackknife) UCL					
85				Minimum	398		95% KM (bootstrap t) UCL					
86				Maximum	671		95% KM (BCA) UCL					
87				Mean	496.7		95% KM (Percentile Bootstrap) UCL					
88				Median	505.8		95% KM (Chebyshev) UCL					
89				SD	77.44		97.5% KM (Chebyshev) UCL					
90				k star	34.23		99% KM (Chebyshev) UCL					
91				Theta star	14.51							
92				Nu star	684.7		Potential UCLs to Use					
93				AppChi2	624.9		95% KM (t) UCL					
94	95% Gamma Approximate UCL (Use when n >= 40)						95% KM (Percentile Bootstrap) UCL					
95	95% Adjusted Gamma UCL (Use when n < 40)						560.2					
96	Note: DL/2 is not a recommended method.											
97												
98	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UC											
99	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006)											
100	For additional insight, the user may want to consult a statistician.											
101												
102												
103	Result_Value (mercury_mg/kg)											
104												
105	General Statistics											
106	Number of Valid Observations						10					
107							Number of Distinct Observations					
108	Raw Statistics						Log-transformed Statistics					
109				Minimum	0.068		Minimum of Log Data					
110				Maximum	0.199		-2.688					
111				Mean	0.116		Maximum of Log Data					
112				Geometric Mean	0.107		-1.614					
113				Median	0.097		Mean of log Data					
114				SD	0.0499		-2.233					
115				Std. Error of Mean	0.0158		SD of log Data					
116				Coefficient of Variation	0.43		0.42					
117				Skewness	0.64							
118												
119												
120	Relevant UCL Statistics											
121	Normal Distribution Test						Lognormal Distribution Test					
122				Shapiro Wilk Test Statistic	0.851		Shapiro Wilk Test Statistic					
123				Shapiro Wilk Critical Value	0.842		0.862					
124	Data appear Normal at 5% Significance Level						Data appear Lognormal at 5% Significance Level					
125												
126	Assuming Normal Distribution						Assuming Lognormal Distribution					
127				95% Student's-t UCL	0.145		95% H-UCL					
128	95% UCLs (Adjusted for Skewness)						-0.157					
129				95% Adjusted-CLT UCL (Chen-1995)	0.146		95% Chebyshev (MVUE) UCL					
130				95% Modified-t UCL (Johnson-1978)	0.146		0.184					
131							97.5% Chebyshev (MVUE) UCL					
132	Gamma Distribution Test						Data Distribution					
133				k star (bias corrected)	4.514		Data appear Normal at 5% Significance Level					
134				Theta Star	0.0257							
135				MLE of Mean	0.116							
136				MLE of Standard Deviation	0.0547							
137				nu star	90.28							
138				Approximate Chi Square Value (.05)	69.37		Nonparametric Statistics					
139				Adjusted Level of Significance	0.0267		95% CLT UCL					
140				Adjusted Chi Square Value	66.19		0.142					
141							95% Jackknife UCL					
142				Anderson-Darling Test Statistic	0.677		0.145					
143				Anderson-Darling 5% Critical Value	0.728		95% Standard Bootstrap UCL					
144				Kolmogorov-Smirnov Test Statistic	0.29		0.141					
145				Kolmogorov-Smirnov 5% Critical Value	0.267		95% Bootstrap-t UCL					
146	Data follow Appr. Gamma Distribution at 5% Significance Level						0.15					
							95% Hall's Bootstrap UCL					
							0.143					
							95% Percentile Bootstrap UCL					
							0.142					
							95% BCA Bootstrap UCL					
							0.145					
							95% Chebyshev(Mean, Sd) UCL					
							0.185					

A	B	C	D	E	F	G	H	I	J	K	L										
Result_Value (total pcb congener (u = 1/2)_ng/kg)																					
221																					
General Statistics																					
223 Number of Valid Observations				10		Number of Distinct Observations				10											
224																					
Raw Statistics						Log-transformed Statistics															
226 Minimum						Minimum of Log Data															
227 Maximum						Maximum of Log Data															
228 Mean						Mean of log Data															
229 Geometric Mean						SD of log Data															
230 Median						0.367															
231 SD						911478															
232 Std. Error of Mean						288235															
233 Coefficient of Variation						0.345															
234 Skewness						0.237															
235																					
Relevant UCL Statistics																					
Normal Distribution Test						Lognormal Distribution Test															
238 Shapiro Wilk Test Statistic						Shapiro Wilk Test Statistic															
239 Shapiro Wilk Critical Value						0.951															
240 Data appear Normal at 5% Significance Level						Data appear Lognormal at 5% Significance Level															
241																					
Assuming Normal Distribution						Assuming Lognormal Distribution															
243 95% Student's-t UCL						95% H-UCL															
244 95% UCLs (Adjusted for Skewness)						34302976															
245 95% Adjusted-CLT UCL (Chen-1995)						95% Chebyshev (MVUE) UCL															
246 95% Modified-t UCL (Johnson-1978)						4005276															
247																					
Gamma Distribution Test						Data Distribution															
249 k star (bias corrected)						Data appear Normal at 5% Significance Level															
250 Theta Star						95% Student's-t UCL															
251 MLE of Mean						95% Chebyshev (MVUE) UCL															
252 MLE of Standard Deviation						4591913															
253 nu star						99% Chebyshev (MVUE) UCL															
254																					
Approximate Chi Square Value (.05)						Nonparametric Statistics															
255 Adjusted Level of Significance						95% CLT UCL															
256 Adjusted Chi Square Value						3116490															
257						95% Jackknife UCL															
258 Anderson-Darling Test Statistic						3170753															
259 Anderson-Darling 5% Critical Value						95% Standard Bootstrap UCL															
260 Kolmogorov-Smirnov Test Statistic						3100302															
261 Kolmogorov-Smirnov 5% Critical Value						95% Bootstrap-t UCL															
262																					
Data appear Gamma Distributed at 5% Significance Level						3254180															
263						95% Hall's Bootstrap UCL															
264 Assuming Gamma Distribution						3231763															
265 95% Approximate Gamma UCL (Use when n >= 40)						95% Percentile Bootstrap UCL															
266 95% Adjusted Gamma UCL (Use when n < 40)						3086839															
267																					
Potential UCL to Use						95% BCA Bootstrap UCL															
268																					
269						3111481															
270																					
Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.																					
These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.																					
271																					
272																					
273																					
274																					
275																					
Result_Value (total pcb congener teq 1998 (avian) (u = 1/2)_ng/kg)																					
276																					
277																					
General Statistics																					
278 Number of Valid Observations						10															
279																					
Raw Statistics						Log-transformed Statistics															
281 Minimum						5.284															
282 Maximum						6.671															
283 Mean						6.022															
284 Geometric Mean						0.448															
285 Median						0.442.6															
286 SD						191.3															
287 Std. Error of Mean						60.48															
288 Coefficient of Variation						0.426															
289 Skewness						0.532															
290																					
291																					
Relevant UCL Statistics																					
Normal Distribution Test						Lognormal Distribution Test															

	A	B	C	D	E	F	G	H	I	J	K	L	
293				Shapiro Wilk Test Statistic	0.922			Shapiro Wilk Test Statistic	0.934				
294				Shapiro Wilk Critical Value	0.842			Shapiro Wilk Critical Value	0.842				
295	Data appear Normal at 5% Significance Level						Data appear Lognormal at 5% Significance Level						
296													
297	Assuming Normal Distribution						Assuming Lognormal Distribution						
298			95% Student's-t UCL	560.3				95% H-UCL	628.6				
299	95% UCLs (Adjusted for Skewness)						95% Chebyshev (MVUE) UCL						
300			95% Adjusted-CLT UCL (Chen-1995)	559.8				97.5% Chebyshev (MVUE) UCL	856.2				
301			95% Modified-t UCL (Johnson-1978)	562				99% Chebyshev (MVUE) UCL	1097				
302													
303	Gamma Distribution Test						Data Distribution						
304			k star (bias corrected)	4.236			Data appear Normal at 5% Significance Level						
305			Theta Star	106.1									
306			MLE of Mean	449.5									
307			MLE of Standard Deviation	218.4									
308			nu star	84.72									
309			Approximate Chi Square Value (.05)	64.51			Nonparametric Statistics						
310			Adjusted Level of Significance	0.0267				95% CLT UCL	548.9				
311			Adjusted Chi Square Value	61.45				95% Jackknife UCL	560.3				
312								95% Standard Bootstrap UCL	543.1				
313			Anderson-Darling Test Statistic	0.375				95% Bootstrap-t UCL	579.7				
314			Anderson-Darling 5% Critical Value	0.729				95% Hall's Bootstrap UCL	627.6				
315			Kolmogorov-Smirnov Test Statistic	0.205				95% Percentile Bootstrap UCL	545.4				
316			Kolmogorov-Smirnov 5% Critical Value	0.267				95% BCA Bootstrap UCL	547.1				
317	Data appear Gamma Distributed at 5% Significance Level							95% Chebyshev(Mean, Sd) UCL	713.1				
318								97.5% Chebyshev(Mean, Sd) UCL	827.2				
319	Assuming Gamma Distribution							99% Chebyshev(Mean, Sd) UCL	1051				
320			95% Approximate Gamma UCL (Use when n >= 40)	590.3									
321			95% Adjusted Gamma UCL (Use when n < 40)	619.7									
322													
323	Potential UCL to Use							Use 95% Student's-t UCL	560.3				
324													
325	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UC												
326	These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)												
327	and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.												
328													
329													
330	Result_Value (total pcb congener teq 2005 (mammal) (u = 1/2)_ng/kg)												
331													
332	General Statistics												
333	Number of Valid Observations						10	Number of Distinct Observations					
334													
335	Raw Statistics						Log-transformed Statistics						
336			Minimum	12.88				Minimum of Log Data	2.556				
337			Maximum	46.6				Maximum of Log Data	3.842				
338			Mean	31.19				Mean of log Data	3.363				
339			Geometric Mean	28.89				SD of log Data	0.436				
340			Median	32.35									
341			SD	11.61									
342			Std. Error of Mean	3.671									
343			Coefficient of Variation	0.372									
344			Skewness	-0.311									
345													
346	Relevant UCL Statistics												
347	Normal Distribution Test						Lognormal Distribution Test						
348			Shapiro Wilk Test Statistic	0.931				Shapiro Wilk Test Statistic	0.889				
349			Shapiro Wilk Critical Value	0.842				Shapiro Wilk Critical Value	0.842				
350	Data appear Normal at 5% Significance Level						Data appear Lognormal at 5% Significance Level						
351													
352	Assuming Normal Distribution						Assuming Lognormal Distribution						
353			95% Student's-t UCL	37.92				95% H-UCL	43.34				
354	95% UCLs (Adjusted for Skewness)						95% Chebyshev (MVUE) UCL						
355			95% Adjusted-CLT UCL (Chen-1995)	36.84				97.5% Chebyshev (MVUE) UCL	58.93				
356			95% Modified-t UCL (Johnson-1978)	37.86				99% Chebyshev (MVUE) UCL	75.24				
357													
358	Gamma Distribution Test						Data Distribution						
359			k star (bias corrected)	4.749			Data appear Normal at 5% Significance Level						
360			Theta Star	6.568									
361			MLE of Mean	31.19									
362			MLE of Standard Deviation	14.31									
363			nu star	94.97									
364			Approximate Chi Square Value (.05)	73.5			Nonparametric Statistics						
365			Adjusted Level of Significance	0.0267				95% CLT UCL	37.23				

